SPRING FLOOD AND WATER RESOURCES OUTLOOK

for the Colorado, North Platte & South Platte Rivers in North Central and Northeast Colorado

issued March 2nd, 2017

click the maps & graphs to link to larger images

Flood Outlook Summary:

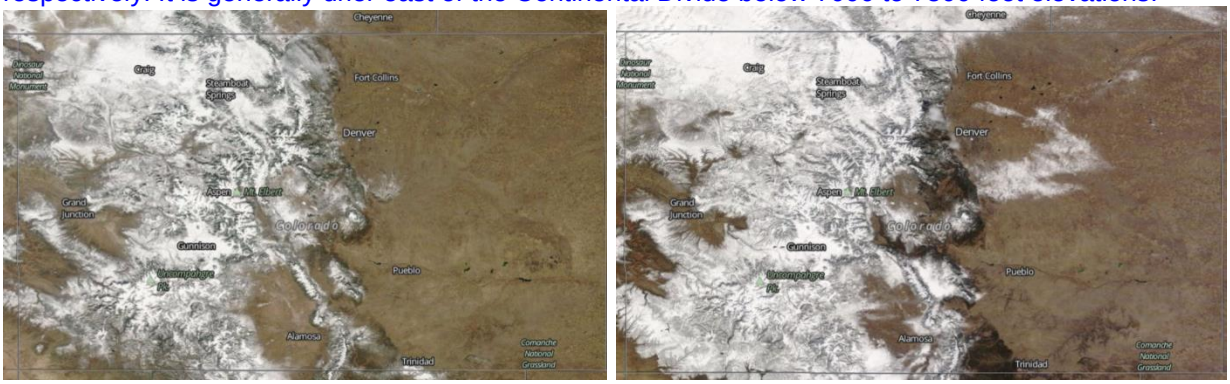
* Near average risk of minor snowmelt flooding in the North and South Platte River basins.
* Slightly above average risk of minor snowmelt flooding in the headwaters of the Colorado River in north central Colorado. Areas prone to flooding in the past may experience issues again this year.
* Significant flooding due to mountain snow runoff alone is not likely. However, it is still early in the snow accumulation season and conditions could change before the runoff begins.

Flooding from snowmelt typically occurs in May and early June. The flood potential is very dependent on weather conditions from now until the melt. The amount of additional snow and rain and the timing of peak flows will have a significant effect on whether it floods.

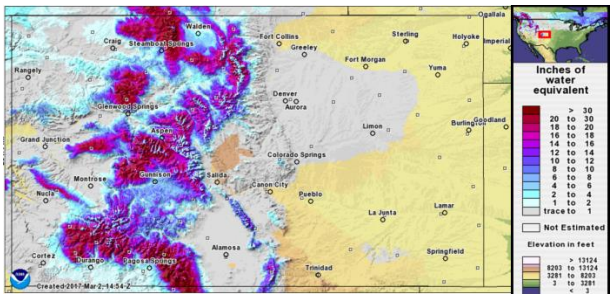
The potential for rain-induced flash flooding is not quantifiable because this type of flooding is usually caused by localized thunderstorms during the spring and summer.

Snow Cover and Mountain Snowpack:

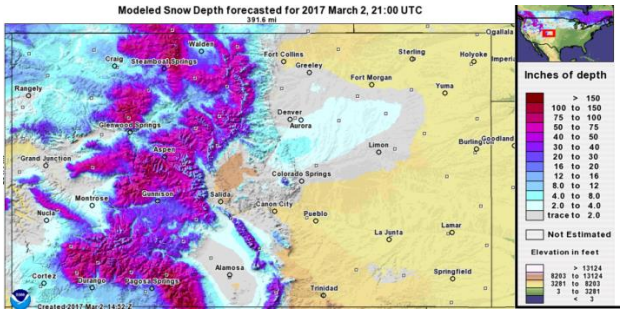
Mountain snowpack remains in good condition...ranging from 123 percent of normal in the North Platte basin to 131 percent of normal in the Colorado River basin. Mountain snowpack does not typically peak until April so we time to accumulate more snow. However, March 2nd snowpack was already 92, 100 and 109 percent of the normal peak snowpack in the South Platte, North Platte and Colorado River basins respectively. It is generally drier east of the Continental Divide below 7000 to 7500 foot elevations.



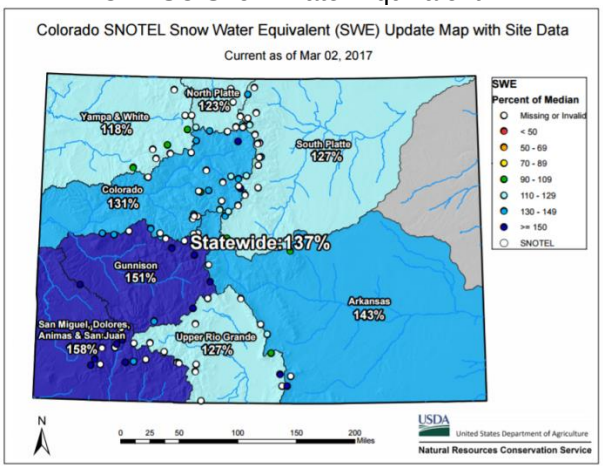
NASA Worldview Satellite Images February 25, 2016 (left) and March 1, 2017 (right)



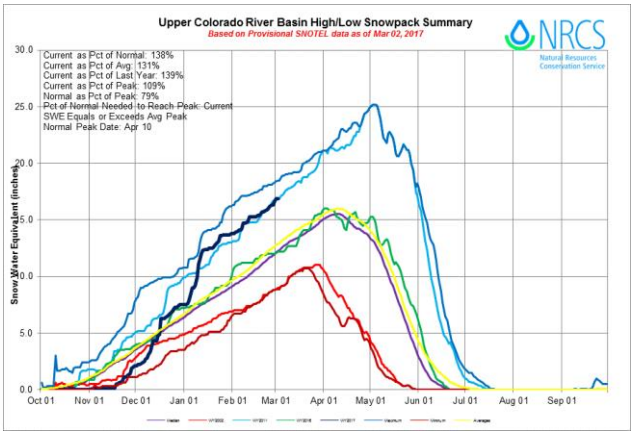
NOHRSC Snow Water Equivalent



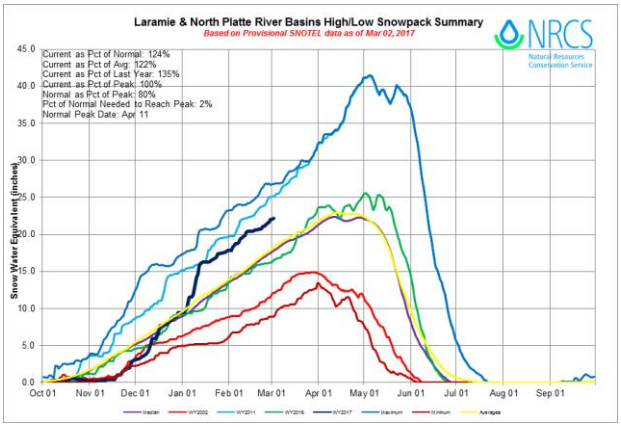
NOHRSC Snow Depth



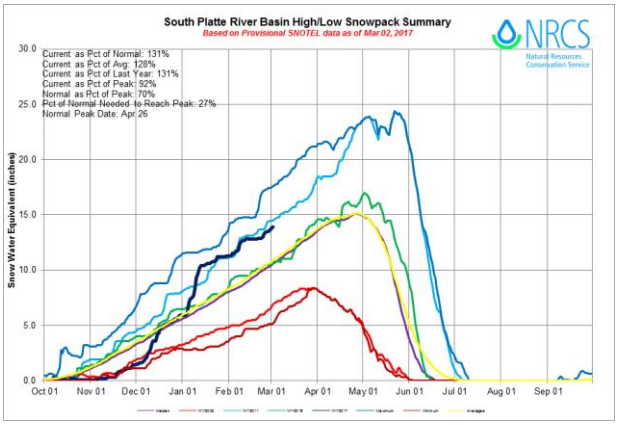
NRCS Mountain SNOTEL Snow Water Equivalent



NRCS Colorado River SNOTEL Time Series



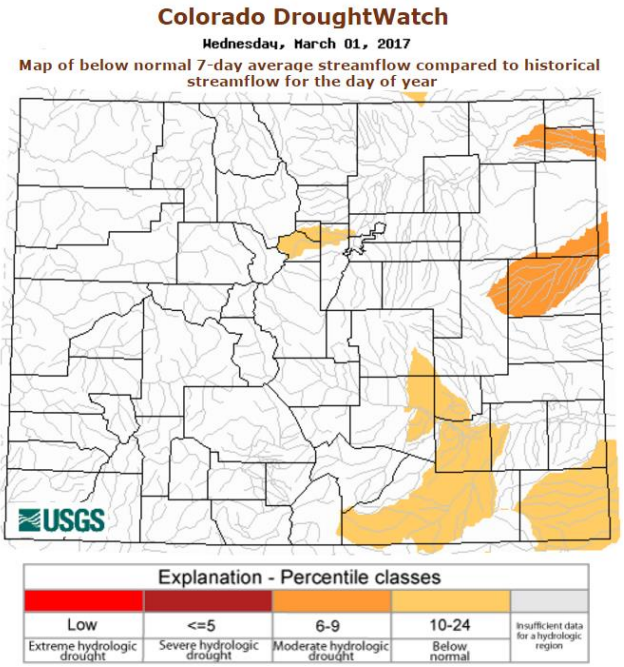
NRCS North Platte River SNOTEL Time Series



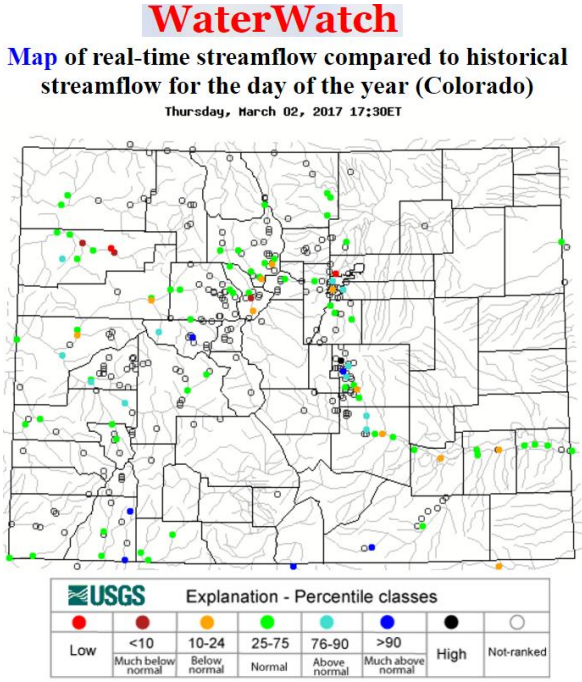
NRCS South Platte River SNOTEL Time Series

Streamflow:

The majority of rivers and creeks have near normal streamflows. However, a basins including Clear Creek in north central Colorado and Frenchman Creek in extreme northeast Colorado have below normal flows.



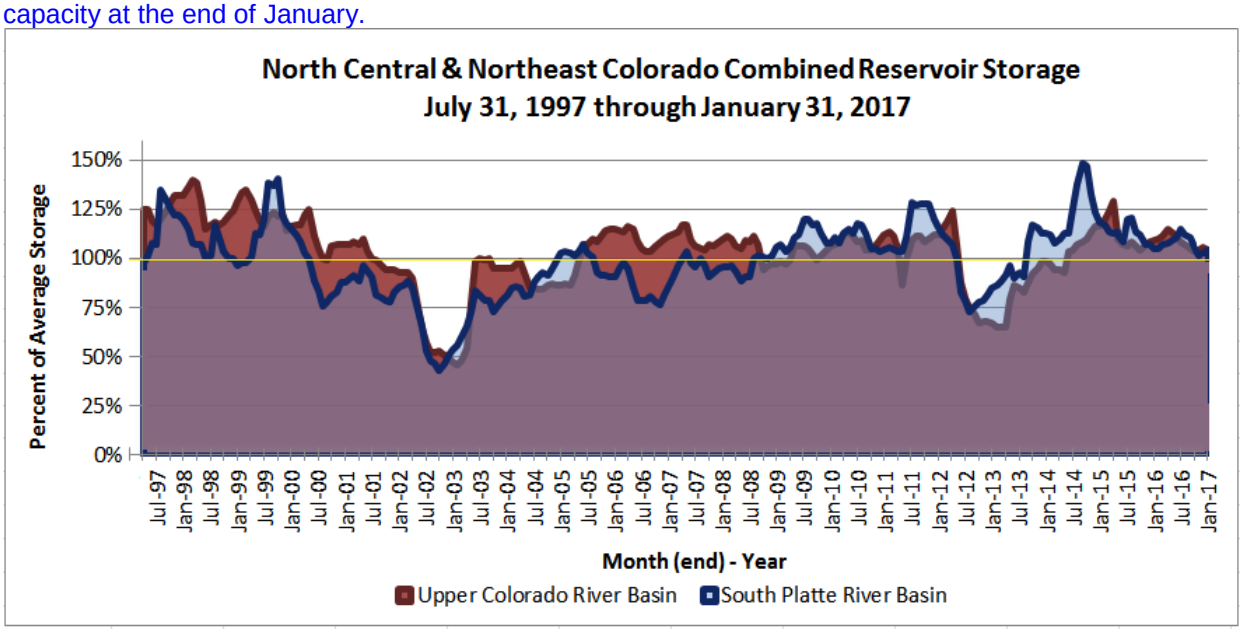
USGS DroughtWatch



USGS WaterWatch

Reservoir Storage:

Basin reservoir storage continued to hold fairly steady at 105 percent of average and 73 percent of capacity at the end of January.



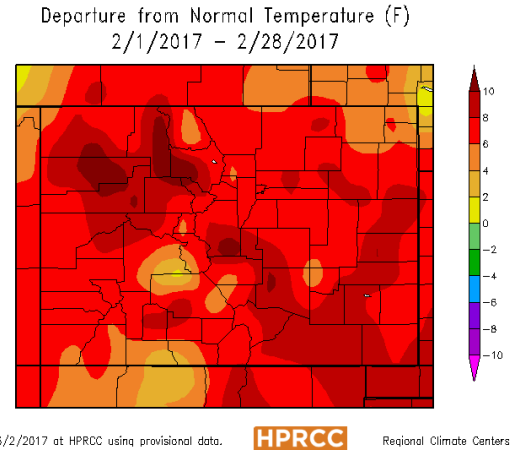
Climate Summaries and U.S. Drought Monitor:

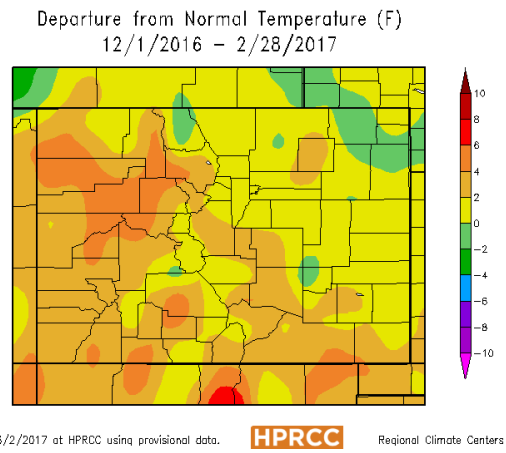
Precipitation and temperatures have generally been near to above normal the past 90 days. Temperatures were 4 to 10 degrees above
normal for February. Compared to normal, February was generally drier than either December or January.

NWS Cooperative Observer February Precipitation					
Location	County	February Precipitation			% of
		2017	Normal	Departure	Normal
Above 8000 feet					
Conifer 6NE	Jefferson	0.46	0.90	-0.44	51%
Georgetown	Clear Creek	0.60	0.85	-0.25	71%
Georgetown 4SW	Clear Creek	1.00	0.89	0.11	112%
Virginia Dale 7ENE	Larimer	0.76	0.50	0.26	152%
Williams Fork Rsvr	Grand	1.04	0.86	0.18	121%
Winter Park	Grand	2.09	2.15	-0.06	97%
6000 to 8000 feet					
Boulder	Boulder	0.73	0.82	-0.09	89%
Castle Rock	Douglas	0.12	0.65	-0.53	18%
Denver area	Denver	0.23	0.37	-0.14	62%
Fort Collins	Larimer	0.52	0.40	0.12	130%
Loveland 2N	Larimer	0.46	0.52	-0.06	88%
Wheat Ridge	Jefferson	0.13	0.70	-0.57	19%
Urban Corridor					
Akron 4E	Washington	0.16	0.40	-0.24	40%
Holyoke	Phillips	0.30	0.49	-0.19	61%
Leroy 5WSW	Logan	0.44	0.41	0.03	107%
New Raymer 21N	Weld	0.28	0.36	-0.08	78%
Sedgwick 5S	Sedgwick	0.32	0.53	-0.21	60%
Woodrow 6NNE	Morgan	0.09	0.34	-0.25	26%

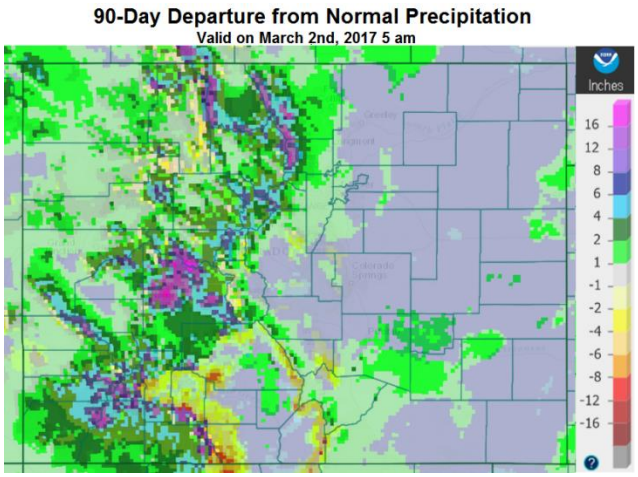
NWS Cooperative Observer 90 Day Precipitation

Location	Elevation	12/01 thru 02/28 Precipitation 16'-17'	Normal	Departure	% of Normal
Above 8000 feet					
Conifer 6NE	7180	1.82	2.66	-0.84	68%
Georgetown	8520	4.62	2.44	2.18	189%
Georgetown 4SW	10020	6.59	2.62	3.97	252%
Virginia Dale 7ENE	7015	2.34	1.48	0.86	158%
Williams Fork Rsvr	7618	4.11	2.57	1.54	160%
Winter Park	9108	9.44	6.50	2.94	145%
6000 to 8000 feet					
Boulder	6484	3.05	2.52	0.53	121%
Castle Rock	6184	1.44	2.01	-0.57	72%
Denver area	5284	1.55	1.13	0.42	137%
Fort Collins	5004	1.93	1.30	0.63	148%
Loveland 2N	5080	2.09	1.64	0.45	127%
Wheat Ridge	5398	1.84	2.17	-0.33	85%
Urban Corridor					
Akron 4E	4540	1.03	1.18	-0.15	87%
Holyoke	3780	1.10	1.35	-0.25	81%
Leroy 5WSW	4550	1.19	1.16	0.03	103%
New Raymer 21N	5180	1.64	1.05	0.59	156%
Sedgwick 5S	3990	1.18	1.35	-0.17	87%
Woodrow 6NNE	4374	1.22	1.11	0.11	110%

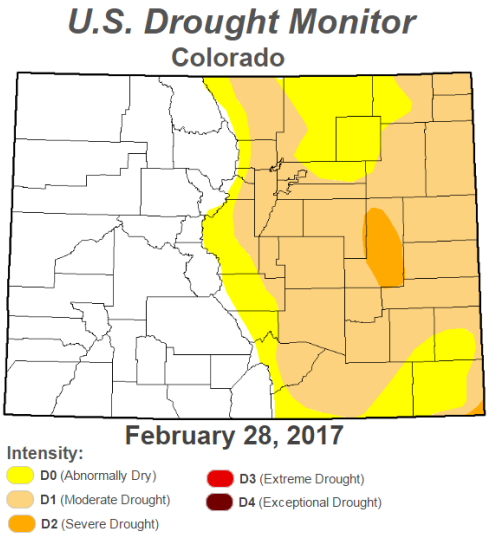




Regional Climate Centers ACIS Climate Maps



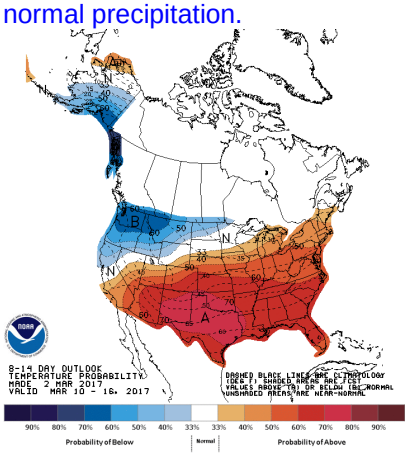
AHPS Precipitation Analysis

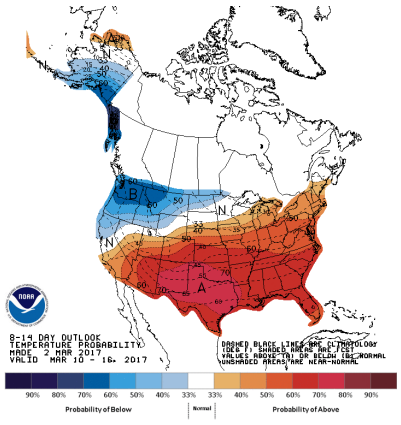


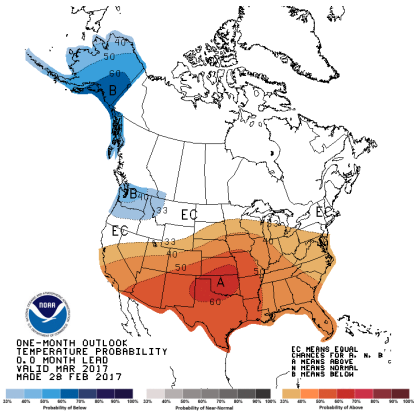
U.S. Drought Monitor

Outlooks:

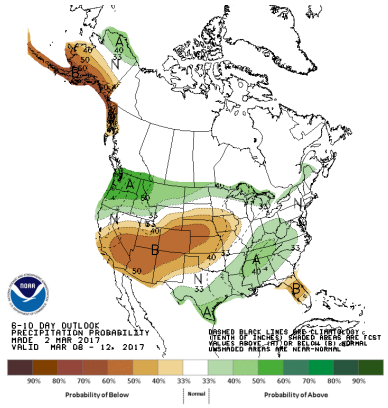
The outlooks for the month of March indicate a higher likelihood of above normal temperatures and below normal precipitation.

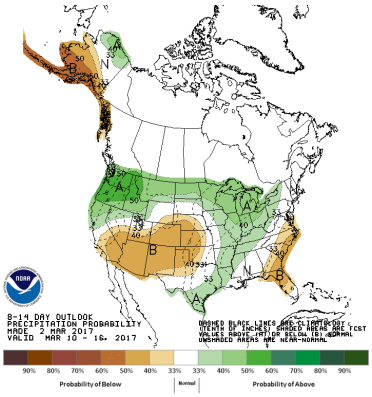


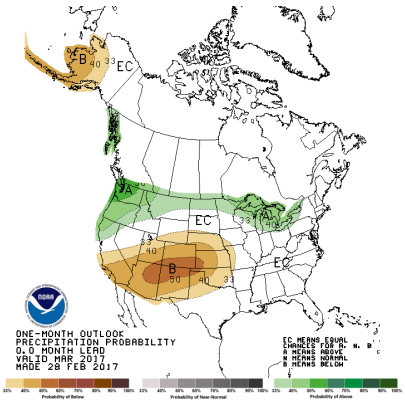




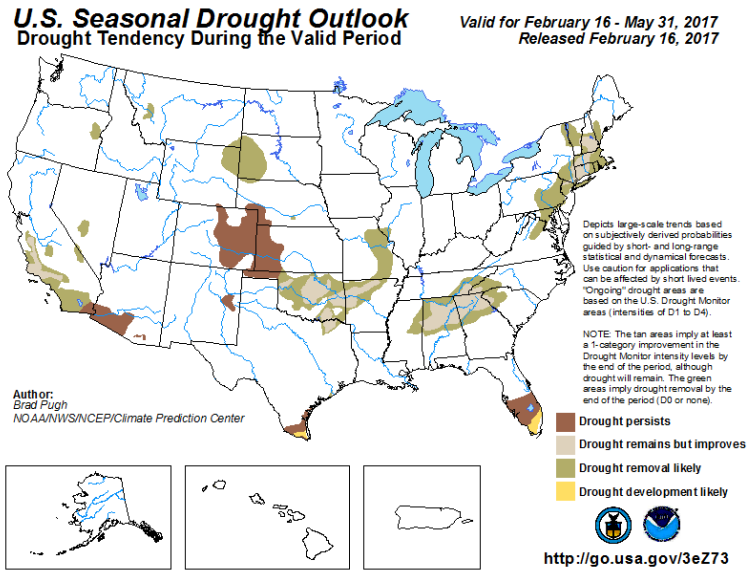
Temperature Outlooks: 6 to 10 Day 8-14 Day One-Month



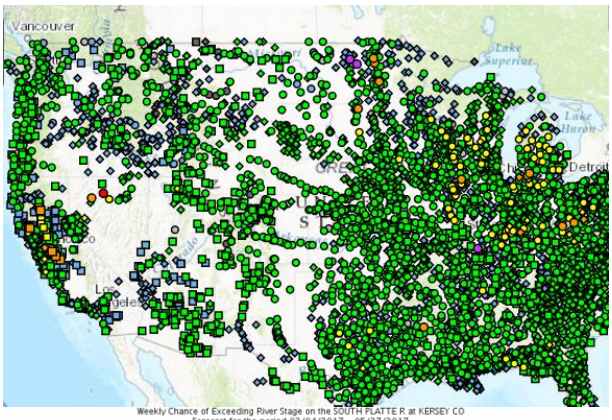


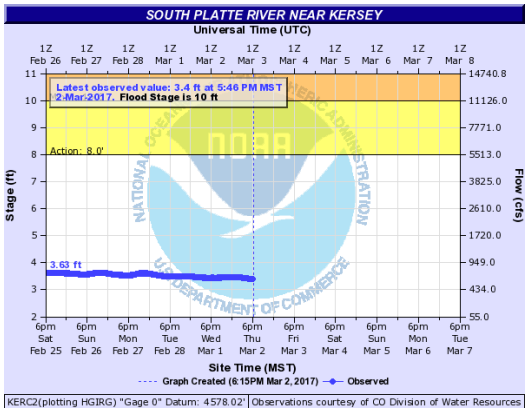


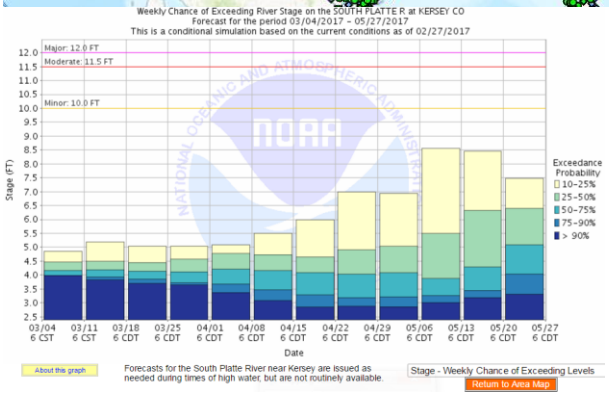
Precipitation Outlooks: 6 to 10 Day 8-14 Day One-Month

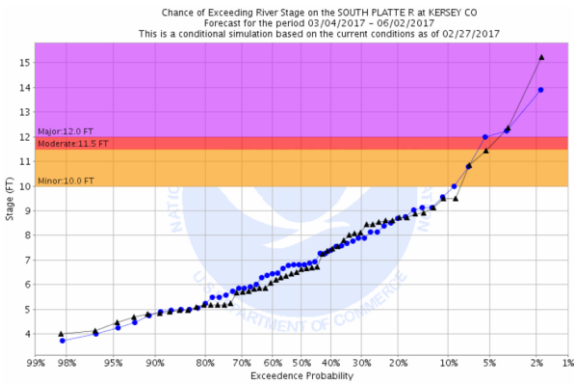


U.S. Seasonal Drought Outlook









Long-range probability forecast graphics for River Forecast Points (example: the chance and weekly chances of exceeding flood stage) are available in AHPS by selecting a point. The 'Probability Information' is on the tab farthest right above the hydrograph.